



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,285	10/16/2003	Jeffrey Donald Manuell	ROC920030361US1	7541

30206
IBM CORPORATION
ROCHESTER IP LAW DEPT. 917
3605 HIGHWAY 52 NORTH
ROCHESTER, MN 55901-7829

7590
07/20/2007

EXAMINER	
CAO, CHUN	

ART UNIT	PAPER NUMBER
2115	

MAIL DATE	DELIVERY MODE
07/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/687,285

Applicant(s)

MANUELL ET AL.

Examiner

Chun Cao

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 11-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Art Unit: 2115

DETAILED ACTION

1. Claims 1, 3-9 and 11-29 are presented for examination.
2. In view of the appeal brief filed on 4/17/07, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Thomas Lee

/Thomas Lee/

3. The text of those applicable section of Title 35, U.S. Code not included in this action can be found in the prior Office Action.

Specification

Art Unit: 2115

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claim 9 recites "a computer-readable program stored on a tangible computer-readable medium"; however, applicant's specification does not provide support for a tangible computer-readable medium as an embodiment of applicant's invention.

Claim Rejections - 35 USC § 101

5. Claim 9 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 9 is not limited to tangible embodiments. In view of Applicant's disclosure, specification page 12, paragraph 0031, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments and intangible embodiments such as signals, waveforms, transmissions and communication link which are non-statutory subject matter. As such, the claim is not limited to statutory subject matter and is therefore non-statutory. Specifically, the claims recite computer program in a computer readable media. The computer readable media as described in the specification includes communication links and computer program on communication links is not a proper manufacture under 35 U.S.C. 101. For purposes of examination it will be interpreted that the media is statutory subject.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 5, 7, 9, 13, 15 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Coppola (Coppola), U.S. patent no. 4,611,289.

As per claim 1, Coppola teaches a method for managing an operation of a computing complex having one or more computer servers during a utility outage [figure 3], the method comprising the steps of:

monitoring one or more operating environment parameters within the computing complex [col. 5, lines 65-68; col. 6, lines 44-54]; and

selectively powering down one or more of the computer servers based on a current state of the operating environment parameters and a criticality value assigned to each of the one or more computer servers [col. 6, lines 44-54; col. 7, lines 17-27].

As per claim 5, Coppola teaches the computing complex is powered by at least one battery driven uninterruptible power supply during the utility outage [col. 6, lines 1-2, 46-47].

As per claim 7, Hansen teaches the utility outage is a power failure [col. 6, lines 1-2, 46-47].

Art Unit: 2115

Regarding to claims 9, 13 and 15, Hansen teaches the claimed method of steps as set forth hereinabove. Therefore, Hansen also teaches the computer program stored in a computer-readable medium to carry out the method of steps.

As per claim 29 is contained the same limitations as claim 1. Therefore, same rejection is applied.

8. Claims 1, 3, 5, 7, 9, 11, 13, 15 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Hansen et al, U.S. patent no. 7,043,647 (hereinafter "Hansen").

As per claim 1, Hansen teaches a method for managing an operation of a computing complex having one or more computer servers during a utility outage [figures 4, 5], the method comprising the steps of:

monitoring one or more operating environment parameters within the computing complex [col. 6, lines 17-24]; and

selectively powering down one or more of the computer servers based on a current state of the operating environment parameters and a criticality value [priority number] assigned to each of the one or more computer servers [col. 10, lines 31-35, 41-66].

As per claim 3, Hansen teaches that one or more operating environment parameters include one or more ambient temperature readings within the computing complex [col. 6, lines 17-24].

As per claim 5, Hansen inherently teaches the computing complex is powered by at least one battery driven uninterruptible power supply during the utility outage [figures 4, 5; col. 12, lines 46-49].

Art Unit: 2115

As per claim 7, Hansen teaches the utility outage is a power failure [col. 10, lines 63-64].

Regarding to claims 9, 11, 13 and 15, Hansen teaches the claimed method of steps as set forth hereinabove. Therefore, Hansen also teaches the computer program stored in a computer-readable medium to carry out the method of steps.

As per claim 29 is contained the same limitations as claim 1. Therefore, same rejection is applied.

9. Claims 4, 8, 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al, U.S. patent no. 7,043,647 in view of Bodas (Bodas), US publication no. 2004/0163001.

As to claims 4 and 12, Hansen does not explicitly teach that one or more operating environment parameters include a current time of day.

Bodas inherently teaches one or more operating environment parameters include a current time of day [paragraph 0059].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Hansen and Bodas because they both teach a method of controlling UPS and managing supplying to the server system, the specify teachings of Bodas stated above would improve the performance and reliability of Hansen system by considering the time as a parameter to better control the UPS.

As to claims 8 and 16, Bodas inherently teaches of the utility failure is a cooling failure within the computer complex [paragraphs 0032, 0035, 0053].

Art Unit: 2115

10. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al, U.S. patent no. 7,043,647 in view of Hammond et al. (Hammond), US patent no. 6,865,685.

As to claims 6 and 14, Hansen does not explicitly teach of sending pager text messages to a predetermined set of support personnel based on the current state of the operating environment parameters.

Hammond teaches of sending pager text messages to a predetermined set of support personnel based on the current state of the operating environment parameters [col. 3, lines 11-14].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Hansen and Hammond because the specify teachings of Hammond stated above would improve the reliability of Hansen system.

11. Claims 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodas (Bodas), US publication no. 2004/0163001 in view of Coppola, U.S. patent no. 4, 611,289.

As per claim 17, Bodas discloses an apparatus for managing an operation of a computing complex comprising one or more computer servers during a utility outage [FIG. 2], the apparatus comprising:

a set of environment equipment for maintaining an operating environment of the computing complex [fig. 3];

an environment monitor server [280, fig. 3; paragraph 0037] coupled to the set of environment equipment for monitoring the current state of one or more

Art Unit: 2115

operating environment parameters within the computing complex [paragraphs 0029, 0032];

a set of control files for determining a current load shed category for the computing complex [paragraph 0035, 0059];

a centralized load shedding manager coupled to the environment monitor server and the set of control files, a centralized load shedding manager shut off power for one or more of the computer servers based on a current state of the one or more environment parameters, the current load shed category for the computing complex of the one or more computer servers [paragraphs 0050, 0051, 0076].

Bodas does not explicitly teach of managing the selective powering down of one or more of the computer servers based on a criticality value assigned to each of the one or more of computer servers.

Coppola teaches of managing the selective powering down of one or more of the computer servers based on a criticality value assigned to each of the one or more of computer servers [col. 7, lines 17-27].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Bodas and Coppola because they both teach a method of controlling UPS, the specify teachings of Coppola stated above would improve the performance of Bodas system by further reducing the power consumption of Bodas system by powering off one or more computer servers according to critical level.

As per claim 18, Bodas discloses the set of environment equipment includes at least one member chosen from the group consisting of: an uninterruptible power supply (UPS), a power distribution unit (PDU), a static transfer switch (STS), an air handling unit (AHU), and a temperature probe [paragraphs 0032, 0039].

As per claim 19, Coppola discloses that one or more operating environment parameters include remaining battery operating time of at least one uninterruptible power supply powering the computing complex [col. 6, lines 44-53].

As per claim 20, Bodas discloses that one or more operating environment parameters include one more ambient temperature reading provided by the temperature probe [fig. 3; paragraphs 0032, 0035, 0053].

As per claim 21, Bodas inherently teaches one or more operating environment parameters include a current time of day [paragraph 0059].

As per claim 22, Bodas teaches the computing environment is powered by the uninterruptible power supply during the utility outage [paragraph 0051].

As per claim 23, Bodas teaches the utility outage is a power failure [[paragraph 0051].

As per claim 24, Bodas inherently teaches of the utility failure is a cooling failure within the computer complex [paragraphs 0032, 0035, 0053].

As per claim 25, Bodas inherently discloses that the set of control files includes a load shedding master table [paragraphs 0050, 0051, 0076].

Art Unit: 2115

12. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodas (Bodas), US publication no. 2004/0163001 in view of Coppola, U.S. patent no. 4,611,289 and Hammond et al. (Hammond), US patent no. 6,865,685.

As to claims 26 and 27, Bodas and Coppola do not explicitly disclose a load shedding pager table. In other word, Bodas and Coppola do not explicitly teach of sending pager text messages to a predetermined set of support personnel according to the load shedding pager table.

Hammond inherently discloses that a load shedding pager table for sending pager text messages to a predetermined set of support personnel [col. 3, lines 11-14].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Bodas and Coppola and Hammond because the specify teachings of Hammond stated above would improve the reliability of Bodas-Coppola system.

13. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bodas (Bodas), US publication no. 2004/0163001 in view of Coppola, U.S. patent no. 4,611,289 and Ewing et al. (Ewing), US patent no. 5,949,974.

As per claim 14, Bodas and Coppola do not explicitly disclose one or more simple network management protocol (SNMP) traps.

Official Notice is taken that the simple network management protocol (SNMP) trap is very well known in the computer art. Such as, Ewing discloses simple network management protocol (SNMP) traps [fig. 1, col. 5, lines 26-36].

Art Unit: 2115

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Bodas and Coppola and Ewing, the specify teachings of Ewing stated above would improve the performance by implementing SNMP protocol in Bodas-Coppola system.

Response to Arguments

14. Applicant's arguments filed on 4/17/2007 have been fully considered but are moot in view of new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao whose telephone number is 571-272-3664. The examiner can normally be reached on Monday-Friday from 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

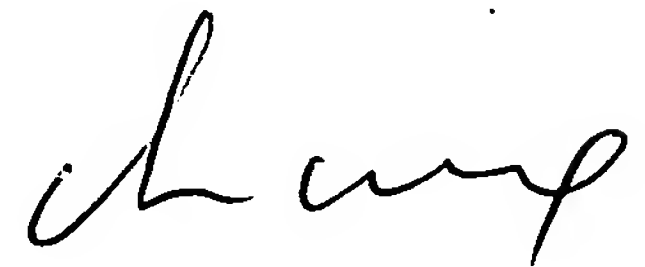
Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public

Art Unit: 2115

PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 13, 2007

A handwritten signature in black ink, appearing to read 'Chun Cao', written in a cursive style.

**CHUN CAO
PRIMARY EXAMINER**